

**An Autonomous Programme Structure of
M. Tech. (Electronics & Telecommunication)
Specialization: Signal Processing
(With Effect From Academic Year: 2017-2018)**

SEMESTER I

Course Code	Course Title	Teaching Scheme Hours /Week			Examination Scheme				Marks	Credit
		Lecture	Tutorial	Practical	In Semester	End Semester	Oral	Practical		
ECSP 1101	Image Processing and Analysis	3	0	0	50	50	0	0	100	3
ECSP 1102	Advanced Digital Signal Processing	3	0	0	50	50	0	0	100	3
ECSP 1103	Mathematics for Signal Processing	3	1	0	50	50	0	0	100	4
ECSP 1104	Research Methodology	3	1	0	50	50	0	0	100	4
PEECSP 1101	Elective I	3	0	0	50	50	0	0	100	3
ECSP 1105	Image Processing and Analysis Lab	0	0	2	0	0	0	25	25	1
ECSP 1106	Advanced Digital Signal Processing Lab	0	0	2	25	0	0	0	25	1
ECSP 1107	Elective I Lab	0	0	2	0	0	25	0	25	1
Total		15	2	6	275	250	25	25	575	20
Grand Total		23			575				575	20

Elective I:

1. Mixed Signal Processing System Design
2. Soft Computing
3. Satellite and Radar Signal Processing

SEMESTER II

Course Code	Course Title	Teaching Scheme Hours /Week			Examination Scheme				Marks	Credit
		Lecture	Tutorial	Practical	In Semester	End Semester	Oral	Practical		
ECSP 1201	Speech Signal Processing	3	0	0	50	50	0	0	100	3
ECSP 1202	Estimation and Detection Theory	3	0	0	50	50	0	0	100	3
ECSP 1203	Multimedia Signal Compression Standards	3	0	0	50	50	0	0	100	3
ECSP 1204	Biomedical Signal Processing	3	0	0	50	50	0	0	100	3
PEECSP 1202	Elective II	3	0	0	50	50	0	0	100	3
ECSP 1205	Speech Signal Processing Lab	0	0	2	0	0	0	25	25	1
ECSP 1206	Multimedia Signal Compression Standards Lab	0	0	2	0	0	25	0	25	1
ECSP 1207	Biomedical Signal Processing Lab	0	0	2	25	0	0	0	25	1
ECSP 1208	Seminar	0	2	0	0	0	50	0	50	2
AC 1201	Audit Course*	0	0	2	0	0	0	0	0	0
Total		15	2	8	275	250	75	25	625	20
Grand Total		25			625				625	20

Elective II:

1. Computer Vision
2. Advanced Wireless Communication Systems
3. Embedded Systems

AC 1201: *Audit Courses – Soft Skills and Business Communication / Entrepreneurship Development

SEMESTER III

Course Code	Course Title	Teaching Scheme Hours /Week			Examination Scheme				Marks	Credit
		Lecture	Tutorial	Practical	In Semester	End Semester	Oral	Practical		
HSEL 2101	Elective III	3	1	0	50	50	0	0	100	4
OE 2101	Elective IV	3	0	0	50	50	0	0	100	3
ECSP 2101	Project Stage I	0	0	18	125	0	100	0	225	9
Total		6	1	18	225	100	100	0	425	16
Grand Total		25			425				425	16

Elective III:

1. Environmental Studies
2. Economics for Engineers
3. Fundamentals of Disaster Management

Elective IV:

1. Architecture for Signal Processing Algorithms
2. Statistical Signal Processing
3. Underwater Acoustics Signal Processing
4. Data Analytics
5. Cyber Security

SEMESTER IV

Course Code	Course Title	Teaching Scheme Hours /Week			Examination Scheme				Marks	Credit
		Lecture	Tutorial	Practical	In Semester	End Semester	Oral	Practical		
ECSP 2201	Project Stage II	0	0	28	200	0	150	0	350	14
Total		0	0	28	200	0	150	0	350	14
Grand Total		28			350				350	14